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Teaming Up To Enhance Interoperable Communications at Thunder Over Louisville

The following public safety agencies shared their knowledge and expertise at a stakeholder coordination meeting to improve public safety communications and interoperability at the 2006 Thunder Over Louisville event:

- Alcohol, Tobbacco, and Firearms
- Churchill Downs
- Department of Emergency Management
- Department of Public Works
- Department of Traffic Operations
- Emergency Management Agency
- Federal Aviation Administration
- Federal Bureau of Investigation
- Federal Protective Service
- Indiana State Police
- Jefferson County Public Schools
- Jefferson County Sheriff's Office
- Kentucky Air National Guard
- Kentucky Army National Guard
- Kentucky Derby Festival
- Kentucky Office of Homeland Security
- Kentucky State Police
- Kentucky Transportation Cabinet
- Kentucky Vehicle Enforcement

- Louisville Emergency Medical Services
- Louisville Fire Department
- Louisville Metro Corrections
- Louisville Metro Electrical Maintenance
- Louisville Metro Health Department
- Louisville Metro IT
- Louisville Metro Police Department
- Louisville Metro Wrecker Services
- McMahon Fire Department
- MetroSafe
- Transport Authority of River City (TARC)
- TRIMARC
- United States Coast Guard
- United States Marshals
- United States Secret Service
- University of Louisville
- University of Louisville Police Department
- Yellow Ambulance

See Appendix A for the full list of participants.

Throughout the meeting, participants were asked to consider the perspectives of agencies that were unable to attend. Below is a list of agencies whose views were represented by other participating agencies:

- Agencies From Floyd and Clark Counties (Indiana)
- Indiana Department of Natural Resources
- Jefferson County Coroner
- Kentucky Hospitals
- National Weather Service
- Public Utilities
- Telecommunications Services
- U.S. Customs and Border Protection

Executive Summary

During the second phase of its Kentucky Regional Communications Interoperability Pilot (RCIP), SAFECOM¹ partnered with Louisville's MetroSafe² to enhance interoperable communications among key public safety response agencies at the 2006 Thunder Over Louisville. Thunder Over Louisville (Thunder) is a fireworks-over-the-water extravaganza that is considered to be the kick-off event of the Kentucky Derby.

On March 28, 2006, over 60 members of the public safety community came together to increase cross-agency dialogue and coordination and to identify key actions to improve interoperable communications capabilities at Thunder. Participants gained a greater awareness of available resources and were challenged to consider innovative ways to work within those resources to enhance interoperable communications capabilities before Thunder took place.

One of the greatest successes of this Communications Coordination Meeting was the simple bringing together of these response agencies and providing them the opportunity to collaborate, coordinate, and exchange information on interoperable communications. A number of key actions were addressed, with some taking place immediately—and public safety responders in the Louisville Metro area left the meeting feeling that they were better prepared for interoperable communications at Thunder. The day was marked by collaboration, creativity, and empowerment—and significant interoperability issues were resolved.

The following list includes key challenges and actions that were addressed during the meeting.

- Responders expressed that there was no central point of contact for communications coordination at Thunder Over Louisville. To meet this need, lead technical and operational coordinators were identified at the meeting.
- Prior to the meeting, MetroSafe did not have the relevant information on agencies that would be participating in the 410 Emergency Operations Center (EOC), the command post for Thunder. During the Communications Coordination meeting, MetroSafe was able to gather immediate information on agencies planning to participate, primary points of contact, and each agency's specific IT resource needs.
- In previous years, technical coordinators did not know the systems and technical resources would be deployed at the event, important information which would have enhanced their planning efforts. To fill this gap, meeting participants completed a resource template about their agencies' communications capabilities, needs, and resources—information that will help improve effective coordination of technology solutions.

¹ See Appendix E for background information on the SAFECOM program and the Kentucky RCIP.

² See Appendix F for more information on MetroSafe.

Introduction

Working Together to Improve Interoperable Communications at Thunder

During the second phase of its Kentucky Regional Communications Interoperability Pilot (RCIP), SAFECOM³ partnered with Louisville's MetroSafe⁴ organization to enhance interoperable communications among key public safety response agencies at the 2006 Thunder Over Louisville (Thunder). This report documents the conversations of over 60 members of the public

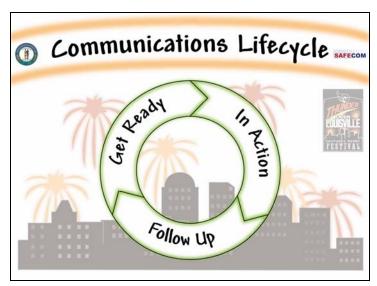
safety community who came together to increase cross-agency dialogue and coordination and to identify key actions to improve their interoperable communications capabilities at Thunder. Participants gained a greater awareness of the available resources and were challenged to consider innovative ways to work within those resources to enhance interoperable communications capabilities before Thunder took place.

What is Interoperability?

The ability of public safety agencies to talk across disciplines and jurisdictions via radio communications systems, exchanging voice and/or data with one another on demand, in real time, when needed, and as authorized.

Supporting a Planned Event

The graphic below demonstrates three interrelated phases for supporting a planned event, including preparation (get ready), support (in action), and reflection (follow up).



- Get Ready Identify key actions and initiatives to prepare for an event, based on planned activities and known challenges.
- In Action Support communications and interoperability activities during the event.
- Follow Up Host after-action analysis of communications and interoperability that follows an event to share lessons learned, reinforce successes, and identify additional key actions to prepare for the next event.

³ See Appendix E for background information on the SAFECOM program and the Kentucky RCIP.

⁴ See Appendix F for more information on MetroSafe.

This meeting focused on the Get Ready phase and on the ways that public safety response agencies can better prepare for communications and interoperability at Thunder. Initiating a common dialogue, participants identified and took immediate action to address current communications challenges. These challenges were divided into three areas: 1) those that could be alleviated with a minimum amount of effort; 2) those so important that all means necessary should be taken to address them; and 3) those that could be addressed with creative thinking, using resources currently within reach.

The group went on to identify specific and detailed actions for addressing each challenge. The day was characterized by collaboration, creativity, and empowerment—and significant interoperability issues were resolved.



Reading This Report

This report outlines the core challenges in preparing for interoperable communications at Thunder as the relevant public safety agencies identified them. Each of the challenges identified is partnered with possible solutions as well as owners and available resources to address the concerns in the 25 days before Thunder.

"Getting all of the response agencies together is the only way to address this issue. This meeting was a long time coming."

- Participant Quote

Surfacing and Analyzing Problems

To better understand areas for improvement, meeting participants from across response agencies were given the opportunity to talk about core challenges in preparing for communications and interoperability at Thunder. Challenges were categorized and prioritized according to level of effort needed to address them and the envisioned, overall impact of the solutions on communications and interoperability. See the illustration below.

The challenges were divided into four sections and grouped by the level of impact and effort required. One section, Ignore, involves challenges that can be set aside and is not documented. The other three sections on challenges, and suggested solutions to those challenges, are outlined in the next section. These three categories are:

- Just Do It High-impact challenges that could be addressed with a minimum amount of effort
- 2. Get Creative Lower-impact challenges that could be addressed, at least in the near term, with creative solutions that leverage what exists and that require minimal effort.
- 3. Win At All Costs High-impact challenges that are worth meeting "at all costs," making a great level of effort worthwhile.



25-Day Tactical Action Plan to Enhance Interoperable Communications at Thunder

By prioritizing the challenges based on impact and effort level, participants developed an action plan that is manageable and should have a significant effect. To address the challenges, meeting participants identified key actions necessary to improve interoperable communications, with available resources, in the 25 days between the Communications Coordination Meeting and Thunder. Outlined below are common obstacles that agencies face when preparing for interoperable communications at Thunder, followed by possible solutions for addressing these concerns.

Just Do It

The following were identified as high-impact challenges that could be addressed with a minimum amount of effort.

Challenge

□ There is no single point of contact for communications coordination at Thunder. Response agencies do not have one point of accountability for their technical and operational communications needs.

Solution

- Ron Pannell was appointed the technical communications coordinator for Thunder.
- Ron Pannell will research frequency coordination techniques in other areas to identify best practices.
- Participating agencies were asked to fill out a resource template to provide information on the technical solutions their agencies employ, their available frequencies, quantity of radios, and other pertinent information.
- Mindy Glenn was identified as the operational point of contact. She will use the meeting contact sheet to gather needed information on agency names, key points of contact, and their contact information.

Challenge

MetroSafe does not know which agencies will use the 410 Emergency Operations Center (EOC) as their command post for Thunder or who will serve as the communications representative for each agency.

Solution

 Agencies that will participate in the 410 EOC are asked to provide their agency, primary point of contact (POC), and e-mail address to Debbie Fox (debbie.fox@louisvilleky.gov). Debbie will send out an e-mail to gather other pertinent information. Connie Mendel, of the Metro Health Department, will follow up with Bill Wetter, also of the Metro Health Department, to determine whether their agency will participate in the EOC.

Challenge

MetroSafe does not know the resource requirements of the agencies that will be using the 410 EOC and therefore cannot adequately prepare to provide access to services such as radios, telephones, telephone contacts, network connectivity, wireless Internet access, and so forth.

Solution

- Agencies that will be at the EOC will provide Dana Spratt
 (dana.spratt@louisvilleky.gov) with additional IT needs, including Internet and
 telephone access requirements.
- Dana Spratt will follow up with Ron Pannell to gather additional IT information from the resource template data that was filled out during the meeting.

Challenge

□ Some agencies use communications channels that are not secure. An example is the U.S. Coast Guard and other marine response agencies that communicate on Marine Band 23, which is also available to private boaters.

Solution

 Bo Glass will provide the Coast Guard with six radios from the Jefferson County Sheriff's Office to allow secure cross-agency communications that the general public cannot intercept.

Challenge

Indiana agencies are not sufficiently involved in planning, although the north side of the Ohio River has many Thunder spectators. The north side would most likely rely on Kentucky for hospitals in an emergency.

Solution

Jim Hickerson, of the Indiana State Police, will contact Major Weedman, of the Louisville Metro Police Department, to invite Kentucky representatives to attend and participate in an Indiana interoperability planning meeting to increase coordination between Kentucky and Indiana in preparing for communications at Thunder.

Challenge

□ There are no common maps or common terminology to describe locations of responders, command posts, and so forth.

Solution

 Mindy Glenn will work with Lieutenant Flaherty, of the Louisville Metro Police Department, and Matt Gibson, of the Kentucky Derby Festival, to integrate all relevant public safety response agencies with his efforts to create consistent grid maps and common location terminology.

Mindy Glenn will distribute relevant information to meeting participants.

Challenge

 University of Louisville Police lack direct communications with Louisville Metro Police at the communications center level.

Solution

 Ron Pannell will add the University of Louisville Police frequencies to the appropriate bridge to allow communications with the Louisville Metro Police Department.

Challenge

 Not all public safety responders have priority cell phone access from cellular providers to ensure service in an emergency.

Solution

- Kelly Livers will work with cellular telephone providers to ensure priority status for meeting participants.
- Meeting attendees are to provide the names of members of their agencies needing priority access to Dana Spratt (dana.spratt@louisvilleky.gov).

Challenge

□ There is currently no master roster of primary points of contact for emergency response agencies at Thunder.

Solution

- Mindy Glenn will maintain an electronic copy of agency liaisons based on the meeting's attendee list.
- Agencies should e-mail Mindy Glenn (mindy.glenn@Impd.loukymetro.org) with the name, agency, and contact information of any additional personnel who should be on the list.

Challenge

□ There is a lack of coordination and communication between the 410 EOC and the command center at the Galt House.

Solution

 Dana Spratt and Ron Pannell will coordinate EOC and command post communications and establish a dedicated phone line between the two operation centers.

Get Creative

Meeting participants felt that the following challenges could be addressed, at least for the near term, with creative solutions that effectively leverage what exists and require minimal additional effort.

Challenge

□ IT technicians are not involved early enough in planning. Rather, they are often brought in as an afterthought, which leads to uninformed assumptions about what technologies are available and what can be done.

Solution

 Agencies will contact their IT departments as soon as possible to include them in the remainder of the Kentucky Derby planning. For future events, IT technicians will be brought in 30–60 days before an event.

Challenge

Technicians are strewn across agencies in an uncoordinated manner. They do not have access to one another, know who will be on site, or know how to work together most effectively.

Solution

 Ron Pannell will coordinate radio range testing with other agency technicians and invite the full list of meeting attendees to test their radios with MetroSafe.

Challenge

□ There is no common incident management software package for agencies to share relevant information, including contact information for key POCs.

Solution

 Jim Graham and Dana Spratt will explore whether the Department of Defense software solution will allow response agencies to share vital information through a secure access site.

Challenge

□ There is no contingency plan for suburban fire support in the event of a large-scale incident. Suburban fire support is not typically involved in Thunder support, but provides additional assistance to the Louisville Fire Department as needed.

Solution

 Urban and suburban fire support will better integrate suburban fire support in interoperability planning efforts to ensure it is prepared to provide coordinated response for a major incident.

Win At All Costs

Meeting participants identified the following challenges as worth winning "at all costs," being of a high enough impact to make a great level of effort worthwhile.

Challenge

 Planning efforts don't account for the possibility of a major incident. Agencies do not know whom to contact or the appropriate procedures for a high-scale incident response.

Solution

 A dialogic notification system exists but needs to be brought up to date in preparation for this year's events.

Challenge

Use of UHF and VHF frequencies is not coordinated.

Solution

 Ron Pannell and Gary Vance will use frequency information provided in the resource template data to enhance usage of UHF and VHF channels.

Remaining Challenges

Meeting participants identified the following challenges as important to address in future planning efforts; however, they did not identify actions to address them prior to Thunder:

- Upper-level commanders do not have their own radio frequency. Further, interdisciplinary dialogue can overload channels needed for command-level communications.
- □ It is unclear whether there is a plan for sharing intelligence information and who holds ultimate responsibility for the collection, analysis, and dissemination of intelligence data.
- Jefferson County Schools need to be better integrated in planning efforts, including communications with the EOC and Health Department. This school district lacks a Memorandum of Agreement for school involvement in response efforts.

Closing

Interoperability Success

One of the greatest successes of the Communications Coordination Meeting was that interoperable communications were improved by merely bringing together multiple response agencies, thus providing them an opportunity to collaborate, coordinate, and exchange information. A number of key actions were addressed, with some taking place immediately—and public safety responders in the Louisville Metro area left the meeting feeling better prepared for interoperable communications at Thunder. Below are some examples of meeting actions:

- Meeting participants identified lead technical and operational coordinators for interoperable communications at Thunder.
- MetroSafe was able to immediately gather information on the agencies planning to participate in the 410 Building EOC, including their specific IT resource needs.
- Meeting participants completed a resource template about their agencies' communications capabilities, needs, and resources. This data will help improve effective coordination of technology solutions.

During the Communications Coordination Meeting, Louisville Metro's public safety practitioners at the local, state, and federal levels determined the most important actions to improve interoperable communications at Thunder. In choosing these actions, each participant committed to do his or her part to coordinate and execute those actions.

"This type of meeting has been needed and will greatly benefit communications at Thunder, if everybody follows through."

- Participant Quote

Appendix A – Participants in Louisville's Communications Coordination Meeting

This directory lists, in alphabetical order by last name, the Communications Coordination Meeting participants.

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Wilder, Lisa

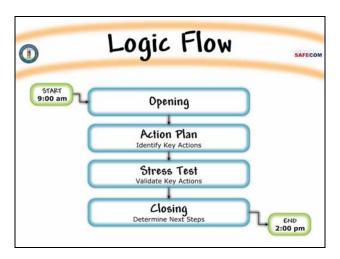
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Appendix B - Meeting Logic Flow

The logic flow depicts the course and direction of the Communications Coordination Meeting. Participants determined the pace of conversations and the transitions through each section of the meeting.



Opening

The meeting opened with a discussion about the purpose and anticipated outcomes of the session. Participants gained an understanding of the strategic intent of the meeting and introduced themselves and the organizations they represent. Participants were informed about the Communications Support Lifecycle, the basic approach for communications support during a planned event. Participants recognized that the focus of the meeting was preparing for communications and interoperability at Thunder, while learning the purpose of the day's discussions.

Action Plan

During conversations, participants shared the key activities of their agencies in preparing for communications at Thunder. Based on this common ground, participants identified core challenges that hinder communications and interoperability capabilities. These challenges were prioritized in a matrix that was based on level of effort required to address the challenges and the level of impact resulting from addressing them. Participants identified key actions to address the challenges and to enhance interoperable communications prior to this year's Thunder.

Stress Test

A fictional, sample incident allowed agencies to think through their communications needs, validate their capabilities, and identify further key actions, as needed. Participants were presented with a sample incident and asked to identify the primary agencies from which they need information, and the agencies to which they need to provide information. They were also asked to rate both their technological and operational capabilities compared to other agencies. Many agencies recognized that adequate communications with agencies outside of their typical scope will require additional effort.

Closing

The meeting closed with a sense of accomplishment. Participants were encouraged to continue to take steps to improve interoperability at Kentucky Derby events.

Appendix C – Louisville Interoperability Background and Communications Preparation Activities

To bring participants onto the same page and to broaden the understanding of cross-agency activities, participants were asked to describe how their agencies' prepare for communications at Thunder. They identified the following preparations and capabilities, organized by agency:

MetroSafe

- Deploys a mobile ACU Tactical Unit to bridge disparate systems.
- o Deploys repeater systems on rooftops to ensure coverage along the river.
- o Tests all public safety radios for standard use and for use in a disaster.
- Provides on-site technical assistance.
- o Provides spare radios, batteries, and chargers.
- Manages communications out of a centralized EOC.
- Deploys the MOTOBRIDGE gateway solution and obtains necessary frequencies from participating agencies.
- o Supports communications for Louisville Metro Police.

EMS

- o Rides with the water patrol to ensure communications.
- o Shares radios with fire agencies.
- o Uses two operations channels.

Louisville Metro Fire

- Has command posts at Galt House and MetroSafe EOC.
- Dispatches for EMS in conjunction with MetroSafe.
- Is able to switch channels to talk with the Coast Guard and EMS via radio (but lacks direct radio access to Louisville Metro Police).

Suburban Fire

- o Brings together chiefs and radio technicians for planning.
- Deploys rescue teams on the river.
- o Supports urban fire response, as needed.

Jefferson County Sheriff's Office (JCSO)

- Sets up a command post and dispatches for JCSO units on Thunder detail.
- Has two boats for partial riverfront patrol.
- Supports Louisville Metro Police in a large-scale emergency or catastrophic event.

Bureau of Alcohol, Tobacco, and Firearms

- Meets with Louisville Metro Police and Emergency Management 45-60 days prior to Thunder.
- Prepares a three-ring binder with communications information, areas of support, and so forth.
- Communicates with Metro bomb squad.

Kentucky Army National Guard

- Uses repeaters to link to microwave system to communicate with Frankfort EOC.
- o Opens command post downtown with TI lines, satellite, and DSS TV channels.

- Places repeaters on rooftops to ensure coverage throughout downtown and under bridges.
- Distributes about 100 hand-held radios.
- Uses two channels: one for traffic control and one for security.
- Uses an ACU-1000.

Kentucky National Guard 41st Civil Support Team (NG CST)

- Sets up a unified command suite downtown and has representatives at the Louisville EOC.
- o Provides radio coverage for its unit and supplies a number of hand-held radios that can be programmed by other agencies.
- Uses satellite, Internet, and repeaters.

Kentucky State Police (KSP)

- Uses a National Emergency Frequency Channel to communicate with the Louisville Metro Police Department when necessary (but does not typically communicate with other agencies).
- o Has a tower site in Oldham County and tests it prior to Thunder.
- o Makes preparations largely according to the operations department.

Louisville Metro Health Department

- Incorporates the network of 13 hospitals in Metro Louisville, southern Indiana, and surrounding counties.
- Coordinates with Louisville Metro Police and special units, special emergency service (focus on WMD), Public Works, city and county fire response, MetroSafe, and Metro EMS.
- Communicates with MetroSafe via radios and has a representative at the Louisville FOC.
- Coordinates plans with the activities of other agencies.
- Supports the Fire Department and joint emergency services unit (ESU) with radiological and chemical detention surveillance.

TRIMARC

- o Uses the same communications plan each year.
- Uses cell phones, radios, and walkie-talkies for communications.

U.S. Coast Guard

- Conducts planning meetings for agencies involved in water response.
- Coordinates all communications for the water-based response of four law enforcement agencies and three fire agencies.
- o Operates on Marine Band 23, which is open to the public, to communicate with other agencies operating on the water (police, fire response, and EMS via fire).
- Uses cell phones to communicate across agencies when Marine Band interference is a problem.
- Uses the National Incident Management System (NIMS) Incident Command System (ICS) Incident Action Plan (IAP) to know which personnel are available and what they are doing.
- Develops resource assignment sheets for IAP with ground-line telephone numbers and the cell phone numbers of boat operators.

Appendix D – Additional Challenges

The following additional core challenges, although not directly discussed in the meeting, were recorded on flip charts during the breakout group discussions:

- ATF feels like they are more reactive than pro-active:
 - o Not included until there is already a problem
 - Not included in the early planning stages of major events
- Real, widespread disaster planning is needed:
 - There is no pre-planned coordination among all agencies for disasters
- No single governing agency has been identified.
- Rumors of video surveillance to the 410 EOC? Fed?
- Vendors:
 - o Telco
 - o Radio
 - o Data
 - Standards among industry leaders
- Open vs. Encrypted Radio Communications:
 - Advanced Encryption Standard (AES)
 - o Type #1
 - Locally devised
 - o Transfer of critical communications across open vs. secure radio paths
 - Protocol to follow or new protocol
- Memoranda of Agreement (MOA) and Memoranda of Understanding (MOU) are needed that identify:
 - Who needs to communicate
 - When to communicate:
 - Day-to-day
 - For purposes of mutual aid
 - Task force
- CDI needs telecommunicator and radio in security office.
- Need pre-planning of assignments, staffing, resources, contact lists.
- ID location for air monitoring
- Who is the incident commander?
- Integrate amateur radio.

Appendix E – Background on SAFECOM and the Kentucky RCIP

SAFECOM, a communications program of the Department of Homeland Security (DHS) Office for Interoperability and Compatibility (OIC), works with its federal partners to provide research, development, testing and evaluation, guidance, tools, and templates on communications-related issues to local, tribal, state, and federal public safety agencies.

Authorized by Section 7304 of the Intelligence Reform and Terrorism Prevention Act of 2004 (Public Law 108-458) to address communication issues facing public safety, OIC, through SAFECOM, is conducting two Regional Communications and Interoperability Pilot (RCIP) projects in Nevada and Kentucky. The purpose of each RCIP is to improve interoperable communications by developing models and tools that can be used nationwide and build upon the work SAFECOM has done with other states and localities.

How was Louisville Chosen?

The SAFECOM program developed criteria for selecting an Urban Area Project. Urban Area Projects should:

- Address a need identified by stakeholders from the area.
- Provide results that will lead to improved interoperability for the community supporting the pilot project.
- Assist in improving interoperable communications with new technology or with the new use of an existing technology.
- Lead to the development of replicable tools or models useful to other communities across the Nation.
- Complete SAFECOM's involvement by April 2006.

The Louisville Metro area met the above criteria and was chosen as the Kentucky RCIP urban area project.

For more information on the SAFECOM program, please visit www.safecomprogram.gov.

Appendix F – Background on MetroSafe



Mission Statement

MetroSafe is public safety and public service agencies working together in the spirit of cooperation, trust, dedication, honesty, commitment, and accountability.

Goals and Objectives

- Create a modern communications and information exchange infrastructure to improve the safety of the citizens and first responders of Louisville Metro.
- Promote interagency cooperation in public safety and public service joint projects and initiatives.
- Promote partnering between public safety and service agencies.
- Consolidate communications—for former suburban and urban fire, police, local government radio, and emergency medical services—in a single facility using common voice and data infrastructure.
- Create a collocated and consolidated communications and emergency management facility.
- Ensure a continuous availability of critical services:
 - o Primary facility will be "site-hardened" with redundant infrastructure.
 - o Additional redundancy will be provided by a true failover site.
- Design, acquire, and put into effect a new Louisville metro-wide wireless and mobile radio infrastructure to support public safety and emergency communications.
- Place consolidated communications in a single civilian organization, reporting to an
 executive director, that is charged with service-level responsibilities for its constituent
 organizations.
- Put into operation an alternate communications and emergency management facility should the primary facility become incapacitated.

As an organization, MetroSafe is a joint operation aimed at consolidating communications for 911, the Louisville Metro Police, Louisville Fire and Rescue, local government radio, and Louisville Metro Emergency Medical Services. In addition, MetroSafe will offer interoperability for all remaining 911 public safety and public service agencies, Jefferson County Sheriff's Office, and suburban city agencies within Louisville Metro as well as the 13 surrounding counties.

The MetroSafe project is responsible for: acquiring a facility; developing and implementing adequate infrastructure to support voice, wireless, and data communications; putting into effect proper security; and acquiring and implementing public safety applications to support consolidated communications and public safety interoperability.

MetroSafe Project Overview

Several project teams are supporting the MetroSafe initiative. Each project team is delineated by its specific public safety or operational function; however, project teams may contain common members. This ensures that Subject Matter Experts (SME) are properly allocated across the entire MetroSafe project organization and communication paths are established within the various teams.

Project Team	Focus
Radio Architecture Team	Acquire and implement a radio architecture that will support MetroSafe's goals and position for future growth.
Operations Team	Develop operational procedures that will support MetroSafe's goals and objectives.
CAD (Computer Aided Dispatch) Team	Acquire and put into effect a CAD system that will support MetroSafe's goals.
Voice Architecture Team	Establish a voice/phone architecture that will support MetroSafe's goals and position its capabilities for future growth.
Facilities Team	Acquire a facility that will support MetroSafe's goals and position its capabilities for future growth.
Interoperability Team	Address local and regional interoperability issues.

Project Status

Due to the size and complexity of the project, the steering committee has taken a phased approach to MetroSafe. The project has three distinct phases:

- Phase 1A Combine all public safety communications into one facility (fall 2005). This
 phase has been completed.
- Phase 1B Put into effect new CAD system (summer 2006).
- Phase 2 Perform remediation of permanent MetroSafe facility and migration of operations (spring 2007).

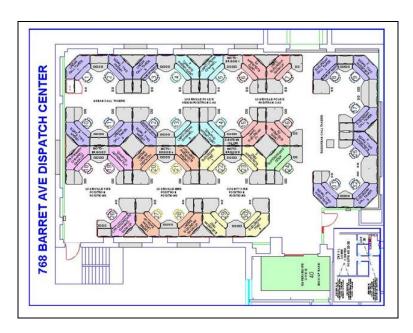
Phase 1A: Combine All Public Safety Communications into One Facility

In order to create a solid foundation for MetroSafe, it was deemed critical to combine all public safety communications into one facility.

Major Milestones

 Build out of the Barret facility to consolidate public safety communications in fall 2005 (completed).

- Create interoperability at the console level by use of Motorola MOTOBRIDGE and new radio consoles in fall 2005 (completed).
- Collocate existing technologies (CAD and 911 systems) in fall 2005 (completed).



Phase 1B: Implement New Computer Aided Dispatch (CAD) System

A new computer aided dispatch system will allow MetroSafe personnel to operate from one common system across all public safety and public service disciplines.

Major Milestones

- RFP release in fall 2004 (completed)
- Vendor demonstrations in winter 2004 (completed)
- Vendor selection process in spring 2005 (completed)
- Contract negotiations in summer 2005 (completed)
- Contract approval and project initiation in late summer 2005 (completed)
- Hardware and software installation in fall 2005 (underway)
- Completion of training and implementation in spring 2006

Phase 2 – Perform Remediation of Permanent MetroSafe Facility and Migration of Operations

Major Milestones (dates to be determined post-Phase 1 implementation)

- Facility remediation
- New radio infrastructure implementation
- Implementation of new 911 voice infrastructure
- Implementation of new information technology infrastructure
- Migration of existing technology, including CAD and supporting systems
- Migration of existing operations to permanent facility
- Ongoing testing and maintenance of failover facility (768 Barret)